

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number
WO 2005/033643 A2

- (51) International Patent Classification⁷: **G01L**
- (21) International Application Number:
PCT/US2004/032090
- (22) International Filing Date: 1 October 2004 (01.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/508,455 3 October 2003 (03.10.2003) US

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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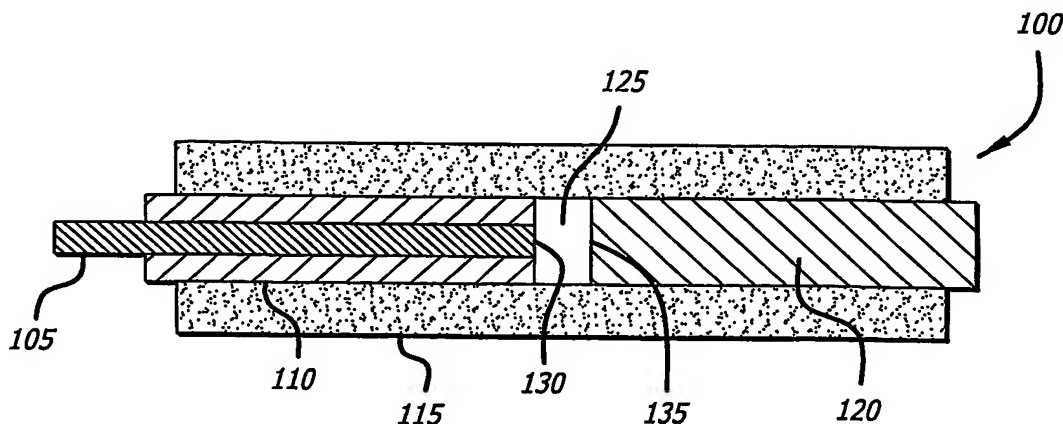
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Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **RUGGED FABRY-PEROT PRESSURE SENSOR**



(57) Abstract: A pressure sensor and system for measuring pressure changes, especially in harsh environments, is described. The pressure sensor has a Fabry-Perot optical cavity formed within a tube with a partial reflective mirror provided by an end of an optical fiber and a reflective mirror provided by an end of a plug, with a gap formed between. The pressure sensor may be disposed within a sensing chamber of a housing having an opening into the environment to be monitored. Alternatively, an isolator means may be used to isolate the sensor from the environment while communicating pressure changes to the sensing chamber. In another embodiment, the sensing chamber is filled with a compressible non-flowing material.

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